

**REMARKS**

The Office Action dated March 21, 2003 presents the examination of claims 1, 3-19, 26, and 34 are pending. Claims 20-21 and 27-32 are withdrawn from consideration. Claims 1, 4, 6, 8, 10, 12, 14, 16, 18, and 26 are amended. Claims 3, 5, 7, 9, 11, 13, 15, 17, 19, and 27 are canceled. No new matter is inserted into the application.

***Rejection under 35 U.S.C. § 112, second paragraph***

The Examiner rejects claims 1 and 3 under 35 U.S.C. § 112, second paragraph for allegedly being indefinite. Applicants respectfully traverse. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

Specifically, the Examiner asserts that the phrase "poly-heterocyclic" is not clear. In response to the Examiner's remarks, Applicants combine claim 3 with claim 1, as suggested by the Examiner. In addition, Applicants combine claim 5 with claim 4. Claims 3 and 5 are canceled. Thus, the instant rejection is overcome.

**Rejection under 35 U.S.C. § 112, first paragraph**

The Examiner rejects claim 1 under 35 U.S.C. § 112, first paragraph for an alleged lack of enablement. Applicants respectfully traverse. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

The Examiner appears to reject claim 1 for recitation of the phrase "selective  $I_{K_{Ca}}$  modulatory activity." The Examiner asserts that "selective  $I_{K_{Ca}}$  modulatory activity" is a laboratory test, rather than a real world disease. Claim 1 is amended to recite a method for treating/alleviating a disease/disorder selected from the group consisting of Addison's disease, alopecia areata, Ankylosing spondylitis, haemolytic anemia (anemia haemolytica), pernicious anemia (anemia perniciosa), aphthae, aphthous stomatitis, osteoarthritis, rheumatoid arthritis, aspermiogenesis, asthma bronchiale, auto-immune asthma, auto immune hemolysis, Bechet's disease, Boeck's disease, inflammatory bowel disease, Burkitt's lymphoma, Chron's disease, chorioiditis, colitis ulcerosa, Coeliac disease, cryoglobulinemia, dermatitis herpetiformis, dermatomyositis, insulin-dependent type I diabetes, juvenile diabetes, idiopathic diabetes insipidus, insulin-dependent diabetes mellitus, auto-immune demyelinating diseases, Dupuytren's contracture, encephalomyelitis,

encephalomyelitis allergica, endophthalmitis phacoanaphylactica, enteritis allergica, autoimmune enteropathy syndrome, erythema nodosum leprosum, idiopathic facial paralysis, chronic fatigue syndrome, febris rheumatica, glomerulo nephritis, Goodpasture's syndrome, Graves' disease, Hamman-Rich's disease, Hashimoto's disease, Hashimoto's thyroiditis, sudden hearing loss, ensoneural hearing loss, hepatitis chronica, Hodgkin's disease, haemoglobinuria paroxysmatica, hypogonadism, ileitis regionalis, iritis, leucopenia, leucemia, lupus erythematosus disseminatus, systemic lupus erythematosus, cutaneous lupus erythematosus, lymphogranuloma malignum, mononucleosis infectiosa, myasthenia gravis, traverse myelitis, primary idiopathic myxedema, nephrosis, ophthalmia sympathica, orchitis granulomatosa, pancreatitis, pemphigus, pemphigus vulgaris, polyarteritis nodosa, polyarthritidis chronica primaria, polymyositis, polyradiculitis acuta, psoriasis, purpura, pyoderma gangrenosum, Quervain's thyroiditis, Reiter's syndrome, sarcoidosis, ataxic sclerosis, progressive systemic sclerosis, scleritis, multiple sclerosis, sclerosis disseminata, acquired spenic atrophy, infertility due to antispermatozoan antibodies, thrombocytopenia, idiopathic thrombocytopenia purpura, thymoma, acute anterior uveitis, and vitiligo. All of these diseases/disorders are real-world diseases.

Furthermore Applicants respectfully submit that the chemical compounds of the present invention inhibit T cell proliferation. It is a well-established fact within immunology that a compound that inhibits T cell proliferation has the potential for being useful for the reduction or inhibition of undesired immune-regulatory actions, such as autoimmune diseases. In fact, one art-recognized definition of an autoimmune disease is "a clinical syndrome caused by the activation of T cells (or B cells or both)."

In a separate matter, the Examiner objects to the term "effective amount." The Examiner asserts that there needs to be a description of the amount of the inventive compound which is "effective." In response to the Examiner's remarks, Applicants respectfully point out that the specification, on page 20, lines 25-26, discloses that the compound may be administered in individual dosages of from about 0.1 to about 500 milligrams. Thus, the instant rejection is overcome.

#### **Restriction Requirement**

On page 12 of the Office Action, the Examiner *appears* to make a Restriction Requirement. The comments on page 12 are very unclear. The Examiner is respectfully requested to clarify these comments. In any event, if it is the Examiner's intention to issue

a Restriction Requirement, then Applicants respectfully traverse such an action.

Specifically, the Examiner asserts, "MPEP 806.05(h) provides for restriction where the compounds may be used for more than one purpose...Applicants need to pick one demonstratable use." The Examiner's statement is in error. MPEP § 806.05(h) provides that a *claim* directed to a product and a *claim* directed to the process of using the product can be restricted if (a) the process of using as claimed can be practiced with another materially different product; or (b) the product as claimed can be used in a materially different process. Thus, MPEP § 806.05(h) does not provide for the restriction of compounds and further does not require Applicants to pick "one demonstratable use." For this reason, the Restriction Requirement (if being made) is clearly improper and must be withdrawn.

***Rejection under 35 U.S.C. § 112, first and second paragraphs***

The Examiner rejects claims 1, 4, 6, 8, 10, 12, 14, and 16 under 35 U.S.C. § 112, first and second paragraphs. Applicants respectfully traverse. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

The Examiner asserts that the intended meaning of "mono- or polycyclic aryl group," and "mono- or poly-heterocyclic group" as recited in claims 1, 4, 6, 8, 10, 12, 14, and 16 is unclear. Applicants insert the subject matter of claims 3, 5, 7, 9, 11, 13, 15, and 17 into claims 1, 4, 6, 8, 10, 12, 14, and 16, respectively, as suggested by the Examiner. Thus, the instant rejection is overcome.

***Rejection under 35 U.S.C. § 103***

The Examiner rejects claims 1 and 34 for allegedly being obvious over Brugnara '103 (U.S. Patent 6,028,103). Applicants respectfully traverse. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

Brugnara '103 teach compounds useful in the treatment of sickle cell disease and diseases characterized by unwanted or abnormal cell proliferation. The compounds of Brugnara '103 are taught to be effective by a different mechanism than the inventive compounds. Specifically, Brugnara '103 teach that the compounds are useful to treat arthritis, arteriosclerotic conditions, and sclerodermia. Claim 1, as amended, is directed to the treatment/alleviation of Addison's disease, alopecia areata, Ankylosing spondylitis, haemolytic anemia (anemia haemolytica),

pernicious anemia (anemia perniciosa), aphthae, aphthous stomatitis, osteoarthritis, rheumatoid arthritis, aspermiogenesis, asthma bronchiale, auto-immune asthma, auto immune hemolysis, Bechet's disease, Boeck's disease, inflammatory bowel disease, Burkitt's lymphoma, Chron's disease, chorioiditis, colitis ulcerosa, Coeliac disease, cryoglobulinemia, dermatitis herpetiformis, dermatomyositis, insulin-dependent type I diabetes, juvenile diabetes, idiopathic diabetes insipidus, insulin-dependent diabetes mellitus, auto-immune demyelinating diseases, Dupuytren's contracture, encephalomyelitis, encephalomyelitis allergica, endophthalmia phacoanaphylactica, enteritis allergica, autoimmune enteropathy syndrome, erythema nodosum leprosum, idiopathic facial paralysis, chronic fatigue syndrome, febris rheumatica, glomerulonephritis, Goodpasture's syndrome, Graves' disease, Hamman-Rich's disease, Hashimoto's disease, Hashimoto's thyroiditis, sudden hearing loss, ensoneural hearing loss, hepatitis chronica, Hodgkin's disease, haemoglobinuria paroxysmatica, hypogonadism, ileitis regionalis, iritis, leucopenia, leucemia, lupus erythematosus disseminatus, systemic lupus erythematosus, cutaneous lupus erythematosus, lymphogranuloma malignum, mononucleosis infectiosa, myasthenia gravis, transverse myelitis, primary idiopathic myxedema, nephrosis, ophthalmia sympathica, orchitis

granulomatosa, pancreatitis, pemphigus, pemphigus vulgaris, polyarteritis nodosa, polyarthritidis chronica primaria, polymyositis, polyradiculitis acuta, psoriasis, purpura, pyoderma gangrenosum, Quervain's thyroiditis, Reiter's syndrome, sarcoidosis, ataxic sclerosis, progressive systemic sclerosis, scleritis, multiple sclerosis, sclerosis disseminata, acquired spenic atrophy, infertility due to antispermatozoan antibodies, thrombocytopenia, idiopathic thrombocytopenia purpura, thymoma, acute anterior uveitis, and vitiligo. The treatment of these specific diseases is neither taught nor suggested by Brugnara '103.

For these reasons, Brugnara '103 fails to render the present invention obvious. Withdrawal of the instant rejection is therefore respectfully requested.

### **Conclusion**

Applicants respectfully submit that the above remarks and/or amendments properly address and overcome all rejections of record. The instant claims recite patentable subject matter such that the present application is in condition for allowance. The Examiner is respectfully requested to issue a Notice of Allowance indicating that pending claims are allowed.



If the Examiner has any questions or comments, please contact Kristi L. Rupert, Ph.D. (Reg. No. 45,702) at the telephone number of the undersigned below.

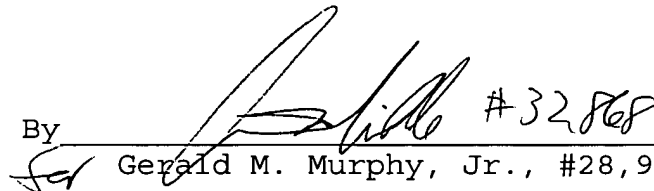
Pursuant to the provisions of 37 C.F.R. § 1.17 and § 1.136(a), Applicant hereby petitions for an extension of one (1) month to July 21, 2003 in which to file a response to the outstanding Office Action. The required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By

 #32868

Gerald M. Murphy, Jr., #28,977

  
GMM/KLR

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

***In the claims:***

Claims 3, 5, 7, 9, 11, 13, 15, 17, 19, and 27 are canceled.

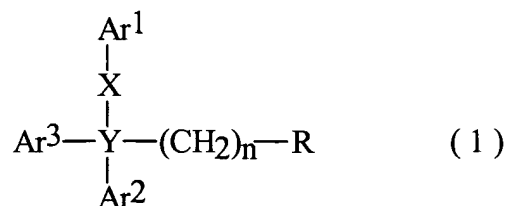
The claims have been amended as follows:

Claim 1. (Three Times Amended) A method for [the treatment, or alleviation of a disease or a disorder or a condition of a mammal, which disease, disorder or condition relates to immune dysfunction] treating or alleviating a disease or disorder selected from the group consisting of Addison's disease, alopecia areata, Ankylosing spondylitis, haemolytic anemia (anemia haemolytica), pernicious anemia (anemia perniciosa), aphthae, aphthous stomatitis, osteoarthritis, rheumatoid arthritis, aspermiogenese, asthma bronchiale, auto-immune asthma, auto immune hemolysis, Bechet's disease, Boeck's disease, inflammatory bowel disease, Burkitt's lymphoma, Chron's disease, chorioiditis, colitis ulcerosa, Coeliac disease, cryoglobulinemia, dermatitis herpetiformis, dermatomyositis, insulin-dependent type I diabetes, juvenile diabetes, idiopathic diabetes insipidus, insulin-dependent diabetes mellisis, auto-immune demyelinating diseases, Dupuytren's contracture, encephalomyelitis, encephalomyelitis allergica, endophthalmia phacoanaphylactica, enteritis allergica, autoimmune enteropathy syndrome, erythema

nodosum leprosum, idiopathic facial paralysis, chronic fatigue syndrome, febris rheumatica, glomerulo nephritis, Goodpasture's syndrome, Graves' disease, Hamman-Rich's disease, Hashimoto's disease, Hashimoto's thyroiditis, sudden hearing loss, ensoneural hearing loss, hepatitis chronica, Hodgkin's disease, haemoglobinuria paroxysmatica, hypogonadism, ileitis regionalis, iritis, leucopenia, leukemia, lupus erythematosus disseminatus, systemic lupus erythematosus, cutaneous lupus erythematosus, lymphogranuloma malignum, mononucleosis infectiosa, myasthenia gravis, traverse myelitis, primary idiopathic myxedema, nephrosis, ophthalmia symphatica, orchitis granulomatosa, pancreatitis, pemphigus, pemphigus vulgaris, polyarteritis nodosa, polyarthritidis chronica primaria, polymyositis, polyradiculitis acuta, psoriasis, purpura, pyoderma gangrenosum, Quervain's thyroiditis, Reiter's syndrome, sarcoidosis, ataxic sclerosis, progressive systemic sclerosis, scleritis, multiple sclerosis, sclerosis disseminata, acquired splenic atrophy, infertility due to antispermatozoan antibodies, thrombocytopenia, idiopathic thrombocytopenia purpura, thymoma, acute anterior uveitis, and vitiligo,

said method comprising administering a therapeutically effective amount of a chemical compound having selective  $IK_{Ca}$

modulatory activity to said mammal, wherein the chemical compound is a triaryl methane derivative represented by Formula I



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein

$n$  is 0, 1, 2, 3, 4, 5 or 6;

$X$  is absent, or represent a group of the formula  $-(\text{CH}_2)_n-$ , of the formula  $-(\text{CH}_2)_n-\text{Z}-$  (in either direction), of the formula  $-(\text{CH}_2)_n-\text{CH}=\text{N}-$  (in either direction), the formula  $-(\text{CH}_2)_n-\text{Z}-(\text{CH}_2)_m-$ , or of the formula  $-(\text{CH}_2)_n-\text{CH}=\text{N}-(\text{CH}_2)_m$  (in either direction) or a group of the formula  $-\text{R}'''\text{C}(\text{O})\text{N}-$ ;

in which formulas

$n$  and  $m$ , independently of each another, represent 0, 1, 2, 3 or 4; and

$Z$  represents O, S, or  $\text{NR}'''$ , wherein  $\text{R}'''$  represents hydrogen or alkyl;

$Y$  represents a carbon atom (C), a nitrogen atom (N), or a phosphorus atom (P), a silicon atom (Si), or a germanium atom (Ge);

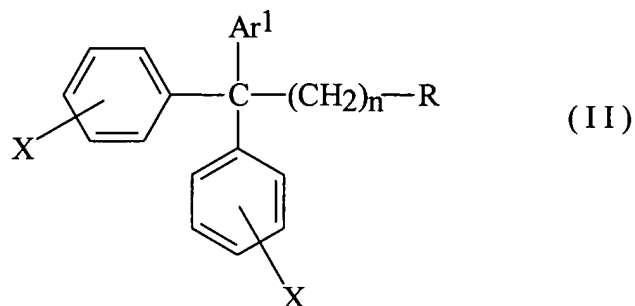
Ar<sup>1</sup>, Ar<sup>2</sup> and Ar<sup>3</sup>, independently of each another, represents a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein the mono- or poly-heterocyclic group is a 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR''), -C(S)NR'(OR''), -C(O)NR'(SR''), -C(S)NR'(SR''), -CH(CN)<sub>2</sub>, -C(O)NR''<sub>2</sub>, -C(S)NR''<sub>2</sub>, -CH[C(O)R'']<sub>2</sub>, -CH[C(S)R'']<sub>2</sub>, -CH[C(O)OR'']<sub>2</sub>, -CH[C(S)OR'']<sub>2</sub>, -CH[C(O)SR'']<sub>2</sub>, -CH[C(S)SR'']<sub>2</sub>, -CH<sub>2</sub>OR'', and -CH<sub>2</sub>SR'';

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of

the formula  $-OR'$ ,  $-SR'$ ,  $-R''OR'$ ,  $-R''SR'$ ,  $-C(O)R'$ ,  $-C(S)R'$ ,  $-C(O)OR'$ ,  $-C(S)OR'$ ,  $-C(O)SR'$ ,  $-C(S)SR'$ ,  $-C(O)NR''(OR')$ ,  $-C(S)NR''(OR')$ ,  $-C(O)NR''(SR')$ ,  $-C(S)NR''(SR')$ ,  $-CH(CN)_2$ ,  $-C(O)NR'_2$ ,  $-C(S)NR'_2$ ,  $-CH[C(O)R']_2$ ,  $-CH[C(S)R']_2$ ,  $-CH[C(O)OR']_2$ ,  $-CH[C(S)OR']_2$ ,  $-CH[C(O)SR']_2$ ,  $-CH[C(S)SR']_2$ ,  $-CH_2OR'$ , or  $-CH_2SR'$ ; or a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein the mono- or poly-heterocyclic group is a 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3 oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano,  $-OR'$ , and  $-SR'$ ; and

$R'$  and  $R''$ , independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 4. (Three Times Amended) The method according to claim 1, wherein the chemical compound is a triaryl methane derivative represented by Formula II



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

$n$  is 0, 1, 2, 3, 4, 5 or 6;

$Ar^1$  represents a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4 diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally

be substituted one or more times with substituents selected from the group consisting of halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)<sub>2</sub>, -C(O)NR"<sub>2</sub>, -C(S)NR"<sub>2</sub>, -CH[C(O)R"]<sub>2</sub>, -CH[C(S)R"]<sub>2</sub>, -CH[C(O)OR"]<sub>2</sub>, -CH[C(S)OR"]<sub>2</sub>, -CH[C(O)SR"]<sub>2</sub>, -CH[C(S)SR"]<sub>2</sub>, -CH<sub>2</sub>OR", and -CH<sub>2</sub>SR";

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)<sub>2</sub>, -C(O)NR'<sub>2</sub>, -C(S)NR'<sub>2</sub>, -CH[C(O)R']<sub>2</sub>, -CH[C(S)R']<sub>2</sub>, -CH[C(O)OR']<sub>2</sub>, -CH[C(S)OR']<sub>2</sub>, -CH[C(O)SR']<sub>2</sub>, -CH[C(S)SR']<sub>2</sub>, -CH<sub>2</sub>OR', or -CH<sub>2</sub>SR'; or a mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR', and -SR';

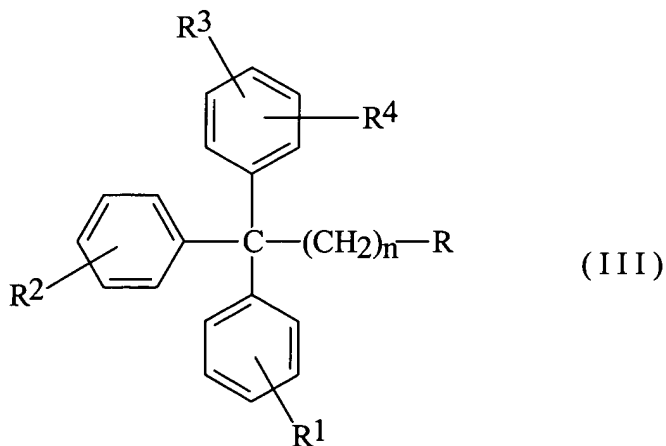
which triaryl methane derivative may further be substituted one or more times with a substituent X selected from the group



consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)<sub>2</sub>, -C(O)NR"<sub>2</sub>, -C(S)NR"<sub>2</sub>, -CH[C(O)R"]<sub>2</sub>, -CH[C(S)R"]<sub>2</sub>, -CH[C(O)OR"]<sub>2</sub>, -CH[C(S)OR"]<sub>2</sub>, -CH[C(O)SR"]<sub>2</sub>, -CH[C(S)SR"]<sub>2</sub>, -CH<sub>2</sub>OR", and -CH<sub>2</sub>SR"; and

R' and R", independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 6. (Three Times Amended) The method according to claim 1, wherein the triaryl methane derivative is represented by Formula III



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

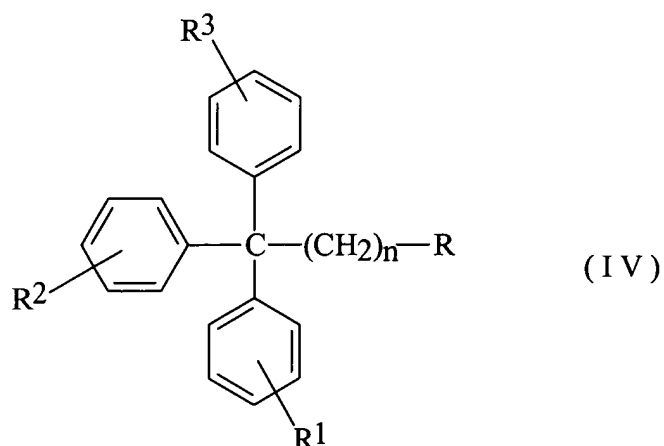
n is 0, 1, 2, 3, 4, 5, or 6;

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)<sub>2</sub>, -C(O)NR'<sub>2</sub>, -C(S)NR'<sub>2</sub>, -CH[C(O)R']<sub>2</sub>, -CH[C(S)R']<sub>2</sub>, -CH[C(O)OR']<sub>2</sub>, -CH[C(S)OR']<sub>2</sub>, -CH[C(O)SR']<sub>2</sub>, -CH[C(S)SR']<sub>2</sub>, -CH<sub>2</sub>OR', or -CH<sub>2</sub>SR'; or a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6-membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR', and -SR';

$R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$ , independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula  $-OR''$ ,  $-SR''$ ,  $-R'OR''$ ,  $-R'SR''$ ,  $-C(O)R''$ ,  $-C(S)R''$ ,  $-C(O)OR''$ ,  $-C(S)OR''$ ,  $-C(O)SR''$ ,  $-C(S)SR''$ ,  $-C(O)NR'(OR'')$ ,  $-C(S)NR'(OR'')$ ,  $-C(O)NR'(SR'')$ ,  $-C(S)NR'(SR'')$ ,  $-CH(CN)_2$ ,  $-C(O)NR''_2$ ,  $-C(S)NR''_2$ ,  $-CH[C(O)R'']_2$ ,  $-CH[C(S)R'']_2$ ,  $-CH[C(O)OR'']_2$ ,  $-CH[C(S)OR'']_2$ ,  $-CH[C(O)SR'']_2$ ,  $-CH[C(S)SR'']_2$ ,  $-CH_2OR''$ , or  $-CH_2SR''$ ; and

$R'$  and  $R''$ , independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 8. (Three Times Amended) The method according to claim 1, wherein the triaryl methane derivative is represented by Formula IV



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)<sub>2</sub>, -C(O)NR'<sub>2</sub>, -C(S)NR'<sub>2</sub>, -CH[C(O)R']<sub>2</sub>, -CH[C(S)R']<sub>2</sub>, -CH[C(O)OR']<sub>2</sub>, -CH[C(S)OR']<sub>2</sub>, -CH[C(O)SR']<sub>2</sub>, -CH[C(S)SR']<sub>2</sub>, -CH<sub>2</sub>OR', or -CH<sub>2</sub>SR'; or a mono-

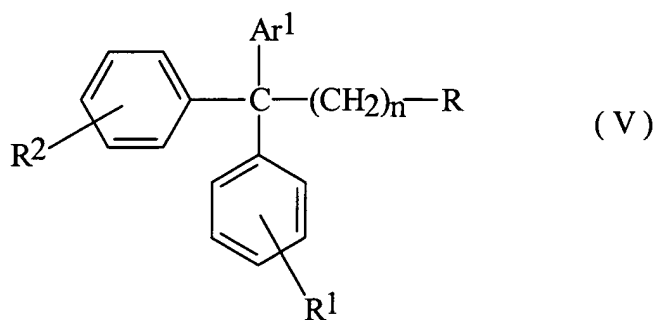
or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from

the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR', and -SR';

R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup>, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)<sub>2</sub>, -C(O)NR"<sub>2</sub>, -C(S)NR"<sub>2</sub>, -CH[C(O)R"]<sub>2</sub>, -CH[C(S)R"]<sub>2</sub>, -CH[C(O)OR"]<sub>2</sub>, -CH[C(S)OR"]<sub>2</sub>, -CH[C(O)SR"]<sub>2</sub>, -CH[C(S)SR"]<sub>2</sub>, -CH<sub>2</sub>OR", or -CH<sub>2</sub>SR"; and

R' and R", independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 10. (Three Times Amended) The method according to claim 1, wherein the triaryl methane derivative is represented by Formula V



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

Ar<sup>1</sup> represents a mono- or polycyclic aryl group selected from the group consisting phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6-membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)<sub>2</sub>, -C(O)NR"<sub>2</sub>, -C(S)NR"<sub>2</sub>, -CH[C(O)R"]<sub>2</sub>, -CH[C(S)R"]<sub>2</sub>, -CH[C(O)OR"]<sub>2</sub>, -CH[C(S)OR"]<sub>2</sub>, -CH[C(O)SR"]<sub>2</sub>, -CH[C(S)SR"]<sub>2</sub>, -CH<sub>2</sub>OR", and -CH<sub>2</sub>SR";

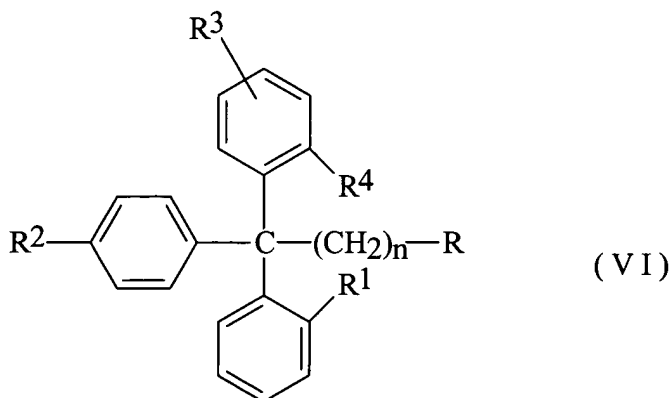
R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)<sub>2</sub>, -C(O)NR'<sub>2</sub>, -C(S)NR'<sub>2</sub>, -CH[C(O)R']<sub>2</sub>, -CH[C(S)R']<sub>2</sub>, -CH[C(O)OR']<sub>2</sub>, -CH[C(S)OR']<sub>2</sub>, -CH[C(O)SR']<sub>2</sub>, -CH[C(S)SR']<sub>2</sub>, -CH<sub>2</sub>OR', or -CH<sub>2</sub>SR'; or a mono- or polycyclic aryl group selected from the group consisting phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6-membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR', and -SR';

R<sup>1</sup> and R<sup>2</sup>, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl,

amino, nitro or cyano; or a group of the formula  $-OR''$ ,  $-SR''$ ,  $-R'OR''$ ,  $-R'SR''$ ,  $-C(O)R''$ ,  $-C(S)R''$ ,  $-C(O)OR''$ ,  $-C(S)OR''$ ,  $-C(O)SR''$ ,  $-C(S)SR''$ ,  $-C(O)NR'(OR'')$ ,  $-C(S)NR'(OR'')$ ,  $-C(O)NR'(SR'')$ ,  $-C(S)NR'(SR'')$ ,  $-CH(CN)_2$ ,  $-C(O)NR''_2$ ,  $-C(S)NR''_2$ ,  $-CH[C(O)R'']_2$ ,  $-CH[C(S)R'']_2$ ,  $-CH[C(O)OR'']_2$ ,  $-CH[C(S)OR'']_2$ ,  $-CH[C(O)SR'']_2$ ,  $-CH[C(S)SR'']_2$ ,  $-CH_2OR''$ , or  $-CH_2SR''$ ; and

$R'$  and  $R''$ , independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 12. (Three Times Amended) The method according to claim 1, wherein the triaryl methane derivative is represented by Formula VI



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

$n$  is 0, 1, 2, 3, 4, 5, or 6;

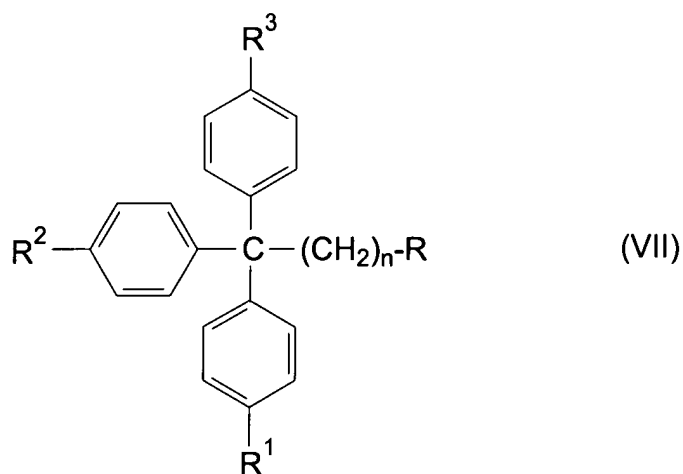


R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)<sub>2</sub>, -C(O)NR'<sub>2</sub>, -C(S)NR'<sub>2</sub>, -CH[C(O)R']<sub>2</sub>, -CH[C(S)R']<sub>2</sub>, -CH[C(O)OR']<sub>2</sub>, -CH[C(S)OR']<sub>2</sub>, -CH[C(O)SR']<sub>2</sub>, -CH[C(S)SR']<sub>2</sub>, -CH<sub>2</sub>OR', or -CH<sub>2</sub>SR'; or a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6-membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR', and -SR';

$R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$ , independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula  $-OR''$ ,  $-SR''$ ,  $-R'OR''$ ,  $-R'SR''$ ,  $-C(O)R''$ ,  $-C(S)R''$ ,  $-C(O)OR''$ ,  $-C(S)OR''$ ,  $-C(O)SR''$ ,  $-C(S)SR''$ ,  $-C(O)NR'(OR'')$ ,  $-C(S)NR'(OR'')$ ,  $-C(O)NR'(SR'')$ ,  $-C(S)NR'(SR'')$ ,  $-CH(CN)_2$ ,  $-C(O)NR''_2$ ,  $-C(S)NR''_2$ ,  $-CH[C(O)R'']_2$ ,  $-CH[C(S)R'']_2$ ,  $-CH[C(O)OR'']_2$ ,  $-CH[C(S)OR'']_2$ ,  $-CH[C(O)SR'']_2$ ,  $-CH[C(S)SR'']_2$ ,  $-CH_2OR''$ , or  $-CH_2SR''$ ; and

$R'$  and  $R''$ , independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 14. (Three Times Amended) The method according to claim 1, wherein the triaryl methane derivative is represented by Formula VII



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

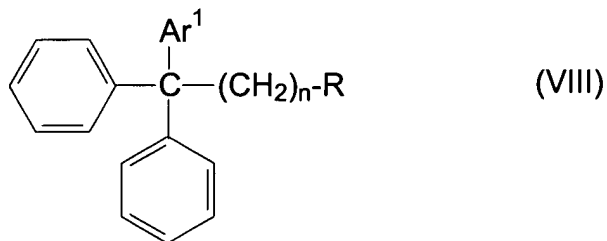
R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)<sub>2</sub>, -C(O)NR'<sub>2</sub>, -C(S)NR'<sub>2</sub>, -CH[C(O)R']<sub>2</sub>, -CH[C(S)R']<sub>2</sub>, -CH[C(O)OR']<sub>2</sub>, -CH[C(S)OR']<sub>2</sub>, -CH[C(O)SR']<sub>2</sub>, -CH[C(S)SR']<sub>2</sub>, -CH<sub>2</sub>OR', or -CH<sub>2</sub>SR'; or a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6-membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from

the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR', and -SR';

R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup>, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)<sub>2</sub>, -C(O)NR"<sub>2</sub>, -C(S)NR"<sub>2</sub>, -CH[C(O)R"]<sub>2</sub>, -CH[C(S)R"]<sub>2</sub>, -CH[C(O)OR"]<sub>2</sub>, -CH[C(S)OR"]<sub>2</sub>, -CH[C(O)SR"]<sub>2</sub>, -CH[C(S)SR"]<sub>2</sub>, -CH<sub>2</sub>OR", or -CH<sub>2</sub>SR"; and

R' and R", independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 16. (Three Times Amended) The method according to claim 1, wherein the triaryl methane derivative is represented by Formula VIII



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

Ar<sup>1</sup> represents a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, wherein said mono- or poly-heterocyclic group is a 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano, -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)<sub>2</sub>, -C(O)NR"<sub>2</sub>, -C(S)NR"<sub>2</sub>, -CH[C(O)R"]<sub>2</sub>, -CH[C(S)R"]<sub>2</sub>, -CH[C(O)OR"]<sub>2</sub>, -CH[C(S)OR"]<sub>2</sub>, -CH[C(O)SR"]<sub>2</sub>, -CH[C(S)SR"]<sub>2</sub>, -CH<sub>2</sub>OR", and -CH<sub>2</sub>SR";

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of

the formula  $-OR'$ ,  $-SR'$ ,  $-R''OR'$ ,  $-R''SR'$ ,  $-C(O)R'$ ,  $-C(S)R'$ ,  $-C(O)OR'$ ,  $-C(S)OR'$ ,  $-C(O)SR'$ ,  $-C(S)SR'$ ,  $-C(O)NR''(OR')$ ,  $-C(S)NR''(OR')$ ,  $-C(O)NR''(SR')$ ,  $-C(S)NR''(SR')$ ,  $-CH(CN)_2$ ,  $-C(O)NR'_2$ ,  $-C(S)NR'_2$ ,  $-CH[C(O)R']_2$ ,  $-CH[C(S)R']_2$ ,  $-CH[C(O)OR']_2$ ,  $-CH[C(S)OR']_2$ ,  $-CH[C(O)SR']_2$ ,  $-CH[C(S)SR']_2$ ,  $-CH_2OR'$ , or  $-CH_2SR'$ ; or a mono- or polycyclic aryl group selected from the group consisting of phenyl, biphenyl, naphthyl, and cyclopenta-2,4-diene-1-ylidene, or a mono- or poly-heterocyclic group, the mono- or poly-heterocyclic group is a 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, and which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro, cyano,  $-OR'$ , and  $-SR'$ ;

$R'$  and  $R''$ , independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

Claim 18. (Three Times Amended) The method according to claim 1, wherein the compound is (4-chlorophenyl-diphenyl)-carbinol; Ethyl 2-phenyl-2-(1-piperidyl)-phenylacetate; or 1,1,1-triphenylacetone; or a pharmaceutically acceptable salt or an oxide or a hydrate [hereof] thereof.

26. (Amended) The method according to any one of claims 1, 4, 6, 8, 10, 12, 14, 16, or 18 [3, 5, 7, 9, 11, 13, 15 or 17], wherein said butyrolactonyl is  $\alpha$ -butyrolactonyl.